

# Data Issues in Cost Estimation Analyses for Industrialising Regions

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## Abstract

Cost estimation analysis for industrialising regions is greatly hampered by a lack of data, and a lack of quality for what data do exist. Cost estimation and planning need to be informed by past data, but common problems that exist are:

1. Scarcity in public domain
2. Accessibility Issues
3. Authentication difficult.
4. Highly scattered
5. Cost adjustments
6. Frequent updating of government regulations
7. Outsourcing by municipalities

As an example of the difficulties faced through use of existing data, Table 1 presents costs for solid waste management by Indian municipalities.

**Table 1 : Per capita expenditure on SWM from various sources  
(roughly 1 US\$ = 50 Rs)**

City	FICCI*	NIUA**	NSWAI***
Delhi	Rs 431	Rs 135	Rs 497
Mumbai	Rs 428	Rs 372	Rs 392
Jaipur	Rs 301	Rs 185	Rs 301
Chennai	Rs 295	Rs 150	Rs 295
Ludhiana	Rs 258	Rs 73	Rs 1

\*FICCI - Federation of Indian Chambers of Commerce and Industry

\*\*NIUA - National Institute of Urban Affairs

\*\*\*NSWAI - National Solid Waste Association of India

The poster for ICLRS would provide an overview of research into cost estimation methods that could be applied to industrialising regions, highlighting data quality issues, and the effects of outliers in data sets on cost estimation tools.